Audit of Forest Planning and Practices

Pope & Talbot Ltd.

Tree Farm Licence 23

FPB/ARC/53

March 2003

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Report from the Board

A. Report from the Board

This is the Board's report on the full scope compliance audit of TFL 23 held by Pope & Talbot Ltd. The primary operating area of TFL 23 is located between Castlegar in the south, and Revelstoke in the north. It features varied climate and terrain, including areas of pine flats and mountainous topography.

The Report from the Auditor (Part C) provides further details on the location of TFL 23, the scope of the audit, and the audit conclusions. The Report from the Auditor is based on the audit procedures described in Part B.[1]

The audit examined Pope & Talbot's operational planning; timber harvesting; road construction, maintenance and deactivation; silviculture; and fire-protection activities for the period of September 1, 2001, to October 10, 2002.

The Board considered the Report from the Auditor, along with supporting audit evidence, and affirms the auditor's findings and conclusions. The forest planning and practices of Pope & Talbot Ltd. complied, in all significant respects, with Code requirements.

This audit was a pilot for the Board. It was the Board's first audit that included consideration of a licensee's forestry certification processes. Pope & Talbot's operations under TFL 23 are certified under the International Organization for Standardization (ISO) 14001, and the Sustainable Forestry Initiative (SFI). With the co-operation of Pope & Talbot and its certifying registrar, the Board's auditors assessed Pope & Talbot's management control structure and the audit work performed by its certifying registrar. Since the Board auditors found they could place reliance on the certification audit work, they were able to reduce the field component of the audit, thereby minimizing time spent in Pope & Talbot's offices and operating areas. The Board is encouraged by the process, as it has proven to increase efficiency while maintaining the Board's high audit standards. The Board intends to continue using this audit methodology where appropriate.

As part of the lessons learned through this pilot audit, Board auditors found it would be possible to report the audit results in more detail, with a focus on key environmental values, thereby providing more meaningful information to the public about the auditee's forest planning and practices. The Board will soon release a special report that highlights this alternative reporting methodology, using the results of the Pope & Talbot Ltd. TFL 23 audit.

The Board commends Pope & Talbot on the current state of its forestry practices on TFL 23. Pope & Talbot's operational planning incorporates a thoughtful approach to the environmental

[1] Part B of this document provides background information on the Board's audit program and the process followed by the Board in preparing its report.

objectives outlined in the *Kootenay Boundary Higher Level Plan* (KBHLP). Examples include the following:

- The KBHLP identifies important habitat for mountain caribou. Pope & Talbot has completed extensive inventory work to identify specific locations where caribou roam, and to assess suitability and capability of forest stands for caribou. Utilizing this inventory information, Pope & Talbot is able to plan its harvesting activities to best address the habitat needs of caribou.

- In addressing the threat to forest health from the mountain pine beetle, Pope & Talbot has identified the pine stands most susceptible to attack, and completed seral stage distribution and patch size analyses. Pope & Talbot uses the patch size analysis, in conjunction with forest health assessments, to target harvesting on pine trees susceptible to beetle attack, while also addressing landscape-level biodiversity objectives.

The KBHLP establishes objectives for many important forest values. These objectives provide direction to licensees, enabling them to incorporate strategies to achieve the objectives on the ground. The Board is encouraged by the progress being made in implementing the KBHLP.

However, one KBHLP objective for maintaining old growth forest next to avalanche tracks, considered to be important grizzly bear habitat, cannot be addressed by licensees until government completes the identification and mapping of this habitat. Provincial government staff have informed the Board that no progress has been made on fulfilling this requirement.

Recommendation

In accordance with section 185 of the *Forest Practices Code of British Columbia Act*, the Board recommends that the provincial government complete the identification and mapping of grizzly bear habitat associated with avalanche tracks, to satisfy the KBHLP objective.

In accordance with section 186 of the Act, the Board requests the provincial government to advise the Board, by December 31, 2003, of the actions taken and the timing involved to address this recommendation.

John Cuthbert
Acting Chair
March 2003

Forest Practices Board Compliance Audit Process

8. Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement holders for compliance with the *Forest Practices Code of British Columbia Act* and regulations (the Code). The Board has the authority to conduct these periodic independent audits under section 176 of the *Forest Practices Code of British Columbia Act* to examine forest planning and practices in operations carried out under the Code requirements.

The Board's audit coverage (limited scope or full scope) of compliance audits is limited scope audits examine selected forest practices (e.g., road construction, maintenance and deactivation, harvesting, or silviculture) and the results of government planning activities. Full scope audits examine all government planning activities and forest practices.

The Board determines how many audits it will conduct each year and the type of audits (limited scope or full scope) to carry out based on its resources and other considerations. The Board audits agreement holders who have entered into a timber sale licence (TSL) or a forest licence (FL). The Board also audits government's Small Business Forest Enterprise Program (SBFEP), which is administered by Ministry of Forests district offices. Selection of agreement holders and SBFEP for audit is random, with some exceptions.

Surveyors, licensees or planning consultants whose forest planning activities and forest practices are to be audited are notified in writing. Auditors gather information and examine the area to be audited. Auditors may also interview agreement holders and SBFEP staff and contractors. After the audit, auditors discuss their findings with the agreement holder or SBFEP staff. The auditors then prepare a draft audit report and discuss it with the agreement holder or SBFEP staff. The agreement holder or SBFEP staff may respond in writing to the draft report. The auditors then finalize the report and send it to the agreement holder or SBFEP staff. The auditors also send the report to the Board. The Board reviews the report and may request additional information or clarification from the auditors. The Board then publishes the report on its website. The Board may also issue a news release to announce the report. The Board may also hold a public meeting to discuss the report. The Board may also send a letter to the agreement holder or SBFEP staff to request a response to the report. The Board may also send a letter to the Ministry of Forests to request a response to the report. The Board may also send a letter to the Ministry of Forests to request a response to the report.

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1 Auditors of government operations may conduct similar audits. Auditors conduct financial audits to express opinions on financial statements. Auditors conduct performance audits to examine whether government is managing its resources economically and efficiently and has effective procedures to measure and report on the effectiveness of its programs. Auditors conduct compliance audits to examine whether government is complying with legislative authorities.

Audit Standards

Audits by the Forest Practices Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards.

The audits determine compliance with the Code, based on criteria derived from the Forest Practices Code of British Columbia Act and its related regulations. Audit criteria are established to evaluate or measure each practice regulated by the Code. The criteria reflect judgments about the level of performance that constitutes compliance with each requirement.

The standards and procedures for compliance audits are described in the Board's Compliance Audit Reference Manual.

Audit Process

Conducting the Audit

Once the Board selects an audit and decides on its scope (limited scope or full scope) and/or area, the audit period and the staff and resources required to conduct the audit are determined. Board staff meet with the parties being audited to discuss logistics before commencing the work.

All the activities carried out during the period subject to audit are identified; for example, harvesting or replanting sites and constructing or deactivating road sections. The items that make up each forest activity are referred to as a "population." For example, all sites harvested form the "timber harvesting population." All road sections constructed form the "road construction population." The populations are then sub-divided based on factors such as characteristics of the sites and potential severity of the consequences of non-compliance on the sites.

For each population, the auditors choose the most efficient means of obtaining information to conclude whether there is compliance with the Code. For efficiencies, auditors usually rely upon sampling to obtain audit evidence, rather than inspecting all activities.

Individual sites and forest practices within each population have different characteristics, such as the type of terrain or type of yarding. Each population is divided into distinct subpopulations on the basis of common characteristics (e.g., steep ground vs. flat ground). A separate sample is selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to the sub-population where the risk of non-compliance is greater.

Audit work in the field includes assessments from the air using helicopters and ground procedures, such as measuring specific features like road or riparian reserve zone width. The audit teams generally spend one to two weeks in the field.

For audits of certified companies, in determining the level of field testing necessary, Board auditors examine and test, a certified company's systems and procedures related to achieving Code compliance, as well as the specific audit tests carried out by certification auditors. The auditors gain an understanding of the requirements of the applicable certification program, and any verification audit(s) undergone by the company, in relation to the requirements of the Code. This entails visiting both the company's and the external verification auditor's offices to review and test certification systems and the certification audit. Field testing is then carried out, generally with smaller sample sizes than in audits of non-certified companies.

Thus, the Board's approach does not assume that all certification programs achieve the public interest, but focuses on an evaluation of the selected licensee's management controls to achieve Code compliance, including an examination of the audit work conducted by the independent certification auditors in determining whether the licensee's procedures for achieving Code compliance conformed with the required certification standards. This testing provides assurance that the certification audit work meets the Board's audit standards, and that a company's certification systems adequately address Code requirements.

If, however, this testing determines that the rigour of the certification audit process is not sufficient, or that certification systems do not adequately address Code requirements, then the licensee is audited by the Board in the same manner as licensees who are not certified.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

Auditors collect, analyze, interpret and document information to determine the audit results. The audit team, composed of professionals and technical experts, first determines whether forest practices comply with Code requirements. For those practices considered to not be in compliance, the audit team then evaluates the degree to which the practices are judged not in compliance. The significance of the non-compliance is determined based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

As part of the assessment process, auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet Code requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that a non-compliance event, or the accumulation and consequences of a number of non-compliance events, is not significant and is not considered worthy of reporting.

Significant non-compliance – where the auditor determines that the event or condition, or the accumulation and consequences of a number of non-compliance events or conditions, is or has the potential to be significant, and is considered worthy of reporting.

Significant breach – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of the non-compliance. A significant breach can also result from the cumulative effect of a number of non-compliance events or conditions

Identification of a possible significant breach requires the auditor to conduct tests to confirm whether or not there has been a breach. If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Ministers of Forests, Energy and Mines, and Water, Land and Air Protection.

Reporting

Based on the above evaluation, the auditor then prepares the "Report from the Auditor" for submission to the Board. The party being audited is given a draft of the report before it is submitted to the Board so that the party is fully aware of the findings. The auditee is also kept fully informed of the audit findings throughout the process, and is given opportunities to provide additional relevant information and to ensure the auditor has complete and correct information.

Once the auditor submits the report, the Board reviews it and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report to the public and government. The representations allow parties that may potentially be adversely affected to present their views to the Board.

At the discretion of the Board, representations may be written or oral. The Board will generally decide on written representations, unless the circumstances strongly support the need for an oral hearing.

The Board then reviews the report from the auditor and the representations from parties that may potentially be adversely affected before preparing its final report, which includes the Board's conclusions and, if appropriate, recommendations.

If the Board's conclusions or recommendations result in newly adversely-affected parties or persons, additional offers of representations would be required.

Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government..

Report from the Auditor

C. Report from the Auditor

1.0 Introduction

As part of the Forest Practices Board's 2002 compliance audit program, Tree Farm Licence 23 was selected for audit from the population of major forest licences within the Nelson Forest Region. The licence, held by Pope & Talbot Ltd. (P&T), was selected randomly and not on the basis of location or level of performance.

Tree Farm Licence (TFL) 23 is an area-based tenure within the Arrow and Columbia Forest Districts. TFL 23 is situated south of Glacier National Park, and extends from Valhalla Provincial Park in the east to Monashee Provincial Park in the west (see attached map). The total area of TFL 23 is 556,389 hectares. The topography in this area is diverse, including areas of pine flats and areas of mountainous terrain. The varied terrain and climate support a variety of commercial tree species, including Douglas fir, western hemlock, Engelmann and white spruce, western white pine and lodgepole pine, sub-alpine fir (balsam), western larch and western red cedar.

There are four community watersheds and abundant riparian features within the TFL, good habitat for grizzly bears and a significant ungulate population—including caribou—throughout the TFL's mountainous areas. Pine beetles are a forest health concern in the southern pine areas of the TFL.

P&T has an allowable annual cut of approximately 600,000 cubic metres under TFL 23, substantially all of which was harvested during the audit period. Harvesting is predominantly by ground-based methods, and the silviculture system used most frequently was clearcut with reserves. During the period of the audit, P&T's operations under TFL 23 were scattered throughout the TFL.

Landscape planning status

The *Kootenay-Boundary Higher Level Plan*[i] took effect under the *Forest Practices Code of British Columbia Act* and related regulations (the Code) on January 31, 2001, and is applicable to the TFL 23 area. This area of land is also defined by 13 landscape units with designated biodiversity emphasis options.

Certification status

Pope & Talbot's woodlands operations under TFL 23 are certified under the International Organization for Standardization (ISO) 14001[ii] and, at the time of the audit, were in the process of being certified under the Sustainable Forestry Initiative program[iii] (SFI). The ISO and SFI programs each have a standard that requires compliance with local legislation.

2.0 Audit Scope and Approach

The Board's audit reference manual, *Compliance Audit Reference Manual, Version 5.1, May 2002,* sets out the standards and procedures used in Board audits of compliance with the Code. The Board authorized a change from the reference manual for this audit to assess aspects of P&T's management control framework.

The audit period, for which P&T's activities were examined for compliance, was September 1, 2001, to October 10, 2002.

The audit involved examination of P&T's:

- procedures established to achieve Code compliance; and
- forest planning and practices carried out.

Controls testing

P&T's procedures for achieving Code compliance were examined to determine the extent, if any, that the procedures reduced the risk of P&T not complying with the Code. The completeness, performance and effectiveness of procedures were assessed.

Where the results of controls testing indicated that P&T's procedures sufficiently reduced the risk of non-compliance with the Code, the Board reduced its substantive testing levels.

The assessment of controls included examining the audit work conducted by P&T's independent certification auditors in determining whether P&T's procedures for achieving Code compliance conformed with the ISO and SFI standards.

Where there was sufficient evidence to demonstrate the adequacy of controls testing by P&T's independent certification auditors, the results of the certification auditors' tests were considered by the Board auditor.

Substantive testing

The audit examined P&T's forest planning and field activities in the areas of operational planning (including forest development planning[iv] and silviculture prescriptions[v]); timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection.

These activities, plans and obligations were assessed for compliance with the Code, including consistency with landscape unit biodiversity emphasis designations and relevant aspects of the *Kootenay-Boundary Higher Level Plan.*

The assessment of these activities included considering the substantive tests (i.e. specific field examinations of P&T's forestry practices) carried out by P&T's independent certification auditors in determining whether P&T had achieved the ISO and SFI standards for compliance with local legislation (the Code).

Candidate activities

The forest activities carried out by Pope & Talbot during the audit period, and therefore subject to audit, were:

Operational Planning

- the approved 2001-2005 forest development plan amendment #1
- 66 silviculture prescriptions approved during the audit period but not yet harvested

Timber harvesting and road construction, maintenance and deactivation

- harvesting of 150 cutblocks and related silviculture prescriptions
- construction of 127 road sections totalling 188.9 kilometres
- maintenance of numerous road sections totalling over 1,400 kilometres, involving activities such as road surfacing and cleaning culverts and ditches
- maintenance of 48 bridges, construction of 5 bridges and installation of 5 major culverts
- semi-permanent or permanent deactivation of 80 road sections totalling 110.8 kilometres
- layout and design of 48 road sections totalling 58.6 kilometres

Silviculture

- site preparation for tree planting on 49 cutblocks and tree planting of 172 cutblocks
- brushing on 80 cutblocks
- regeneration obligations for 160 cutblocks
- free-growing obligations for 8 cutblocks

Fire protection

- fire-protection planning and infrastructure
- fire tools and equipment for active operations

3.0 Audit Findings

This section describes the audit of P&T's activities and the audit results.

Controls examined

The audit tests of P&T's controls focused on procedures related to the identification and management of key environmental values within TFL 23: visual quality, wildlife habitat, water quality, soil conservation and stability, forest health and biodiversity.

The tests of controls included examining and re-performing some of the audit work carried out by P&T's independent certification auditors in June 2002 (SFI registration audit and ISO surviellance audit). P&T procedures tested included:

- forest planning processes, including inventory information maintained by F&T, riparian assessment, wildlife habitat identification and verification processes, visual assessment, forest health assessments and old-growth management;
- site-specific inspection processes, including pre-work information gathering and communication procedures, monitoring and inspection processes and inspection reporting and completion of follow-up actions; and
- road maintenance inspection processes, including identification and completion of maintenance works required.

Forest planning and practices examined

The audit work on selected roads and cutblocks included ground-based procedures and assessments from the air using a helicopter.

Audit testing included re-performing a sample of the audit work carried out by F&T's certification auditors, who examined 17 cutblocks and 11 sections of road in the field.

The Board auditors also examined:

Operational planning

- the approved 2001-2005 forest development plan amendment #1, including its consistency with the *Kootenay-Boundary Higher Level Plan*

Timber harvesting and road construction, maintenance and deactivation

- harvesting of 16 cutblocks and their related silviculture prescriptions
- construction of 11 road sections totalling 24 kilometres, and their related road layout and designs
- maintenance of numerous road sections totalling over 200 kilometres
- maintenance of 2 bridges and construction of 3 bridges
- semi-permanent or permanent deactivation of 16 road sections, totalling approximately 20 kilometres

Silviculture

- site preparation for tree planting on 2 cutblocks
- free-growing obligations for 8 cutblocks

Fire protection

- fire protection planning and infrastructure
- fire-tools and equipment for 6 sites with operations active during the audit

Findings

The audit found that F&T's forest planning and practices complied, in all significant respects, with Code requirements for operational planning; timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection.

F&T's planning and practices were also consistent with landscape unit biodiversity emphasis designations and relevant aspects of the *Kootenay-Boundary Higher Level Plan*.

4.0 Other Comments

Establishing landscape level objectives under the Code through higher level plans and landscape unit planning is important to licensees' forest development planning to ensure, among other objectives, adequate consideration of wildlife habitat needs, biological diversity, and water quality.

The *Kootenay-Boundary Higher Level Plan (KBHLP)*, which took effect January 31, 2001 (replaced on October 26, 2002), establishes objectives for several important forest values in TFL 23's licence area.

The KBHLP sets out the objective to maintain the old-growth structure of forests adjacent to avalanche tracks, which is important for grizzly bear habitat. The objective, however, does not take effect until the avalanche tracks have been identified and mapped by government agencies.

At the time of our audit, the required mapping had not been undertaken. Therefore, it was not possible to determine the extent of protection, or adequacy of management, of these important habitat features in the TFL 23 licence area.

The absence of objectives in this situation is not considered non-compliance with the Code.

5.0 Audit Opinion

In my opinion, the operational planning; timber harvesting; road construction, maintenance, and deactivation; silviculture; and fire-protection activities carried out by Pope & Talbot Ltd. under Tree Farm Licence 23, from September 1, 2001, to October 10, 2002, were in compliance, in all significant respects, with the requirements of the Code as of October 2002.

Without qualifying my opinion, I draw attention to section 4.0, which describes the implementation of the *Kootenay-Boundary Higher Level Plan*, and its impact on the audit of F&T's forest planning and practices.

In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

Sections 2.0 and 3.0 of this report from the auditor describe the basis of the audit work performed in reaching this opinion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Code.

Steven M. Tribe, CA
Auditor of Record
Victoria, British Columbia
January 13, 2003

Audit of Pope and Talbot Ltd
Tree Farm Licence 23

Enlargement
area

[1] A higher-level plan is a [illegible] that establishes a specific [illegible] objectives, [illegible] and [illegible] to [illegible] a project. [illegible]

[2] The International Organization for Standardization (ISO) is a [illegible] that [illegible] and [illegible] standards. ISO 14001 is the international standard defining the [illegible] that [illegible] procedures, processes, and resources required to implement an environmental management system. It does not specify environmental performance criteria, but provides a framework for an organization to [illegible] and [illegible] objectives and targets, taking into account [illegible] and reporting systems. Understanding [illegible] certification under ISO 14001 is [illegible].

[3] The Sustainable Forestry Initiative program (SFI) is a [illegible] that [illegible] principles, objectives, and performance measures that integrate the [illegible] growing, and harvesting of trees, while the protection of wildlife, plants, soil, and water quality. Through a [illegible] process, members, companies, and licensees may choose to apply a certification [illegible] and communicate their [illegible] to the SFI standards.

[4] A forest development plan is an operational plan that provides the public and government agencies with information about the location of proposed road and cutblocks. It is [illegible] of a forest [illegible] area. The plan must specify measures that will be carried out to protect forest resources. It must also be consistent with any higher-level plans. This specific plan is required to be consistent with the forest stewardship plan.

[5] A silviculture prescription is an site-specific operational plan that describes the forest management objectives for [illegible] and the [illegible] that will be used to [illegible] the objectives. It includes information [illegible] such as [illegible], including the type of [illegible], and provides a [illegible] growing, stand management objectives. Silviculture prescriptions must be consistent with forest stewardship plans that are required for areas [illegible] by prescriptions applies.

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